## 2016 County Level Study

Data from the 2016 Missouri County-Level Study (CLS) has recently been added to the Community Data Profiles website. This new data includes a treasure trove of recent, local-level information on a variety of risk factors, health behaviors, and health screenings for Missouri adults.

Links to the new data can be found in the bottom left corner of the Profiles home page (*below*). For the time being only the **County-Level Study Profile** (the first of the two links in that section) has the newer 2016 data. Plans to add the 2016 data to the County Level Study Comparison Profile are underway.

the wait is over...
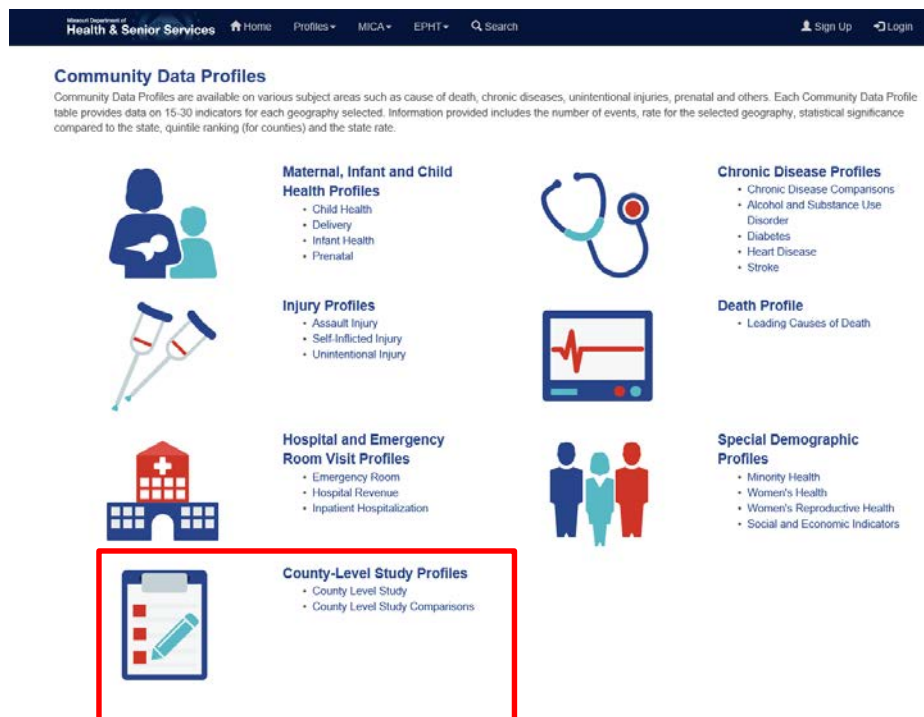
For those who may not have used this data resource in the past, the CLS is a telephone survey similar in scope to the Behavioral Risk Factor Surveillance System (BRFSS) that is conducted every year and surveys non-institutionalized persons age 18+. The biggest difference between the two is size. The CLS is a much larger survey, with a total of 52,000 household interviews conducted statewide, compared to the 7,000 done annually for BRFSS. This larger survey gives analysts the ability to develop *county level estimates* that are simply not available through smaller surveys and most other data sources.

The CLS survey is funded by the Missouri Foundation for Health and collaborates with the Department of Health & Senior Services (DHSS) and the University of Missouri's Health and Behavioral Risk Research Center. For more information about the survey, visit the following website: https://health.mo.gov/data/cls/index.php

With that introduction out of the way, let's look at what kinds of data are available. The initial Profile page highlights statewide trends with a total of 53 indicators divided into 8 broader sections. The first section displays **General Health** statistics (*below*). The first of these indicators gives the percent of adults that self-rated their health as either fair or poor. Statewide, we can see about 1 in 5 adults (19.71%) identify as having fair or poor health.

			All				
Indicator		Number of Respondents	Prevalence (%)	95% CI Lower	95% CI Upper	Graphics Link	Download Data
General Health							
Fair or Poor General Health Status		50,790	19.71	18.93	20.49	Graphics	
Activity limitation		50,081	23.28	22.41	24.14	Graphics	
Access to Care							
No health care coverage - Ages 18-64		30,295	13.81	12.96	14.66	Graphics	
Did not get medical care because of cost or no insurance - Among those who needed medical care but could not get it in the past 12 months		8,160	52.72	50.16	55.28	Graphics	
Last had a routine physical checkup more than 2 years ago		47,047	16.26	15.42	17.10	Graphics	
No dental care coverage		47,292	60.95	59.92	61.98	Graphics	

However, the greatest value with the CLS Profile is that you can get county-specific data. The menu at the top of the page allows users to select Profile reports for each of the 115 counties (as well as Kansas City and each of the BRFSS regions). Once the geography selection (*below*) is changed from '*Statewide*' to '*County*', the middle box is automatically modified where users can select any county in the state for display.

Once you have selected your county, it is important to remember to click on the **Submit** button. You will know what community's data you are seeing based on the geographic label located just below the *Choose Your Profile* data section (*below*). In this example, we are showing the Profile page for Jasper County (where most of the city of Joplin is located).

It is important to note that all 53 variables or indicators are included for each geography. If there was not enough data to calculate an estimate for a given geography (which is very rare), the data columns will include asterisks instead of displaying numbers. The labels are hyperlinked to definitions that provide additional information about how that indicator was developed, including the specific question or set of questions asked to respondents.

About halfway down the Profile page, there is a section on **Chronic Diseases and Conditions**. This includes valuable information on diagnoses like asthma, COPD, depressive disorders, diabetes or pre-diabetes, and high blood pressure, as well as several others (*below*). Users can easily obtain information on the number of people surveyed in Jasper County, the estimated prevalence for the county, and 95% confidence intervals. You might also see that there is a Regional Significance column where we are comparing Jasper County to the Southwest Region and determining if there is a meaningful difference in prevalence, higher or lower, between the county and the region. Although not shown here, the table also includes a state significance test, which compares Jasper County to the state rate.

Indicator	All				
	Number of Respondents	Prevalence (%)	95% CI Lower	95% CI Upper	Regional Significance
Chronic Diseases and Conditions					
Ever been told had arthritis	719	28.35	22.98	33.72	NS
Current Asthma	718	12.15	7.89	16.41	NS
Ever been told had cancer	722	11.71	7.72	15.71	NS
Ever been told had COPD, emphysema or chronic bronchitis	721	8.03	4.86	11.20	NS
Had high cholesterol - Among age 18 and older who have had cholesterol checked	580	31.99	25.69	38.30	NS
Had high cholesterol - Among age 35 and older who have had cholesterol checked	511	34.83	27.75	41.92	NS
Ever been told had a depressive disorder	720	24.48	18.97	30.00	NS
Ever been told had pre-diabetes	720	7.46	4.46	10.47	NS
Ever been told had diabetes	722	9.66	6.34	12.98	NS

We hope that users are as excited as we are (Data nerds unite!) to have this valuable data available on the MOPHIMS application. Keep an eye out for updates to the County Level Study Comparison Profile. We look forward to your feedback on this new data and how you are using it in your community!
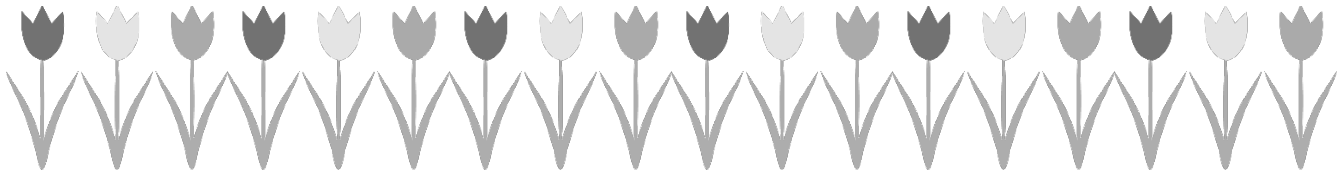
Data Updates

The team would like to apologize for the tardiness in updating the hospitalization and emergency room data on MOPHIMS. As some of you know, in 2015 the mechanism for which we group this data, International Classification of Disease codes, changed--moving from the ICD-9-CM version to ICD-10-CM. The great news is that this update will allow greater specificity when it comes to analyzing hospital diagnoses, but the negative is that we've had to dramatically change the way we prepare the data for public use. To this end, we've made the decision to prioritize accuracy over timeliness. That said, if you need access to 2016-2017 hospitalization or emergency room data please reach out to Andrew.Hunter@health.mo.gov or Whitney.Coffey@health.mo.gov and we will do all that we can to get you what you need.

The following table lists the most current data years available on MOPHIMS MICAs. Please note much of the data from the Data MICAs feed the Community Data Profiles, which have also been updated.

MICA	Most Recent Data Year Available	MICA	Most Recent Data Year Available
Birth MICA	2017	Population MICA	2017
Cancer Incidence MICA	2015	Pregnancy MICA	2017
Chronic Disease Deaths MICA	2017	Preventable Hospitalization MICA	2015
Chronic Disease Emergency Room MICA	2015	Procedures MICA	2015
Chronic Disease Inpatient Hospitalization MICA	2015	TANF MICA	2012
Death MICA	2017	WIC Prenatal MICA	2016
Emergency Room MICA	2015	WIC Postpartum MICA	2016
Fertility and Pregnancy Rate MICA	2017	WIC Linked Prenatal – Postpartum MICA	2016
Injury MICA	2015	WIC Infant MICA	2016
Inpatient Hospitalization MICA	2015	WIC Child MICA	2016
Mo Healthnet (Medicaid) MICA	2016		
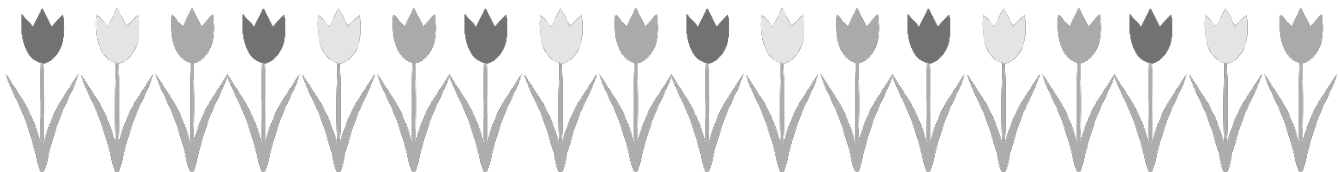
Two New Datasets-
Enhanced Opioid Overdose and Violent Death Surveillance in Missouri (PART II)

In the last edition of the MOPHIMS newsletter, two new surveillance projects funded by the CDC were introduced. We covered the Enhanced State Opioid Overdose Surveillance (ESOOS) program in more detail, and now we would like to do the same with the National Violent Death Reporting System (NVDRS). Whereas

ESOOS collects more detailed data on opioid overdose deaths, NVDRS collects similar information on violent deaths (including homicides, suicides, accidental firearm deaths, and deaths of undetermined intent).

While Missouri began participating in NVDRS in 2016, the CDC started this program much earlier. The program began in 2002 with six states reporting data. NVDRS has been onboarding additional states since. As of September 2018, all 50 states, Washington D.C. and Puerto Rico are participating in NVDRS.

Much like ESOOS, NVDRS reporting requirements include the collection and abstraction of death certificate data as well as toxicology, autopsy, and investigation reports from coroners and medical examiners. In addition to these reports, NVDRS also requires the collection of law enforcement reports. DHSS partners with State Highway Patrol and local law enforcement agencies in order to access and abstract this data. Linking these reports through abstraction into the CDC's NVDRS database allows for analysis of variables that otherwise would not be possible. The data within this database remains anonymous and incidents entered into the system do not include any personally identifiable information in order to protect the confidentiality of those involved in a violent death.

NVDRS collects myriad data elements relating to the circumstances of each violent death. Victim and suspect demographic information, when and where the victim was killed, stressors (job loss, physical or mental health problems), suspected gang-involvement, alcohol and/or drug use, and relationship information between perpetrator and victim are just some of the data elements collected.

Homicide Rates for Missouri and the U.S. 2008-2017
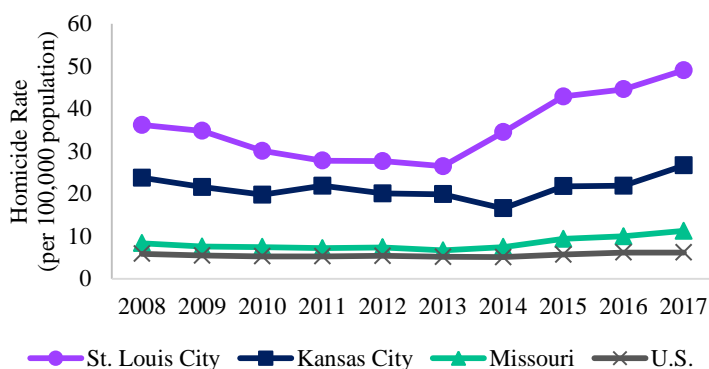
The vast majority of NVDRS cases in Missouri are suicides and homicides. The statewide homicide rate is only slightly higher than the United States, however St. Louis City's and Kansas City's rates are much higher (*right*). In 2017, St. Louis City ranked #1, and Kansas City #5, for highest violent crime rates in U.S. cities over 250,000 population. In 2017, St. Louis City also had the highest homicide rate in the U.S. among cities with a population greater than 250,000.

While homicide rates are highest in the urban areas, suicide is a major concern across the entire state. It is the tenth leading cause of death for all Missourians and the second leading cause of death for youth (10-24). The rate of suicide is almost twice that of homicide. Missouri's suicide rate is consistently higher than the national rate (*left*).

The enhanced knowledge obtained through data abstraction in NVDRS can be used by various stakeholders to bolster violence and injury

Suicide Rates for Missouri and the U.S. 2008-2017
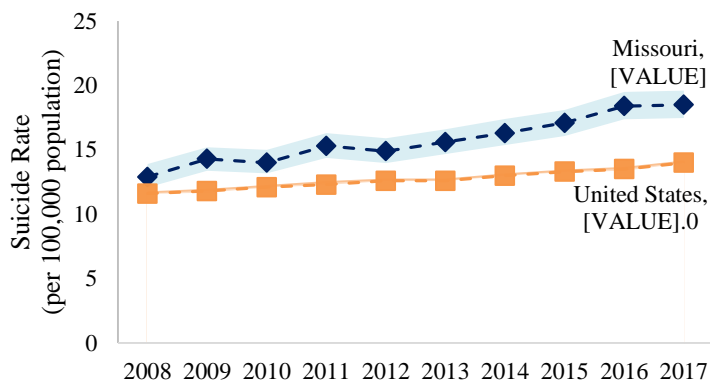
prevention programs across the state. Many units within the DHSS, such as injury prevention and women's health, can use this information in their programs. Other state departments such as the aforementioned Highway Patrol and Department of Mental Health are key stakeholders as well. Partners at the local level including LPHAs, coroners/medical examiners, and law enforcement agencies can use NVDRS data to make informed decisions to improve their own community.

One newly formed stakeholder group in which NVDRS participates is the Missouri Suicide Prevention Network. This was created by the Missouri Coalition for Community Behavioral Healthcare in partnership with the Missouri Department of Mental Health. It is an independent, non-partisan, voluntary group of individuals, organizations, and agencies (both public and private) with a mission to lead statewide suicide prevention efforts. The Department is excited to partner with the many collaborators that this new network has brought together and looks forward to all of the successes it will be able to accomplish.

Readers interested in learning more about the NVDRS team are encouraged to continue reading as Cassady Palmer, the project manager, and Lily Kennedy, the data abstractor, are featured in this issue's Public Health Spotlight.
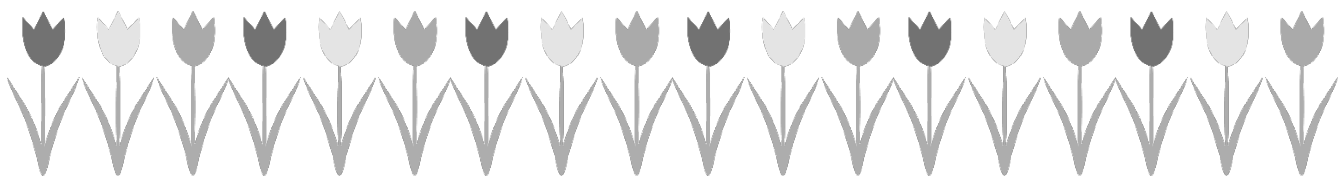
Public Health Spotlight

 For this issue's public health spotlight, we shine the light on DHSS's NVDRS team, Cassady Palmer and Lily Kennedy.

As a Senior Epidemiology Specialist, Cassady serves as project lead in Missouri for NVDRS. Cassady hails from the Hoosier State, graduating from Indiana University – Bloomington with a bachelor's degree in political science and a master's degree in public affairs (with a concentration on health policy). Cassady came to Missouri to work with DHSS, first doing research analysis of birth data and then later analysis of deaths. In her current role with NVDRS, Cassady coordinates the Missouri portion of the program, MOVDRS. This includes liaising with Missouri law enforcement, interacting with Missouri's Child Fatality Review Panel, and contacting local coroners and medical examiners to get more detailed information for the violent deaths that occur in their areas of responsibility.

Working with Cassady to meet grant requirements, Lily serves as a Health Program Representative I. Lily was born and raised in Central Missouri, and she graduated from Mizzou with a bachelor's in biology with minors in math and anthropology. Prior to working at DHSS, she worked for the Missouri Department of Conservation, monitoring the environmental health of Missouri's rivers and creeks. Now, she is the primary NVDRS analyst, entering the violent death information into the NVDRS database. Her job is not simply a data entry role, however. Lily examines death certificates, news articles, toxicology reports, and other documents associated

with the death to document the circumstances surrounding the death, resulting in a comprehensive report including the important details of the death and events leading up to it.

Lily and Cassady are wrapping up their first full year of reporting Missouri violent deaths into NVDRS. Cassady hopes that MOVDRS can publish a dashboard to the DHSS website with statewide violent death data displayed in an easily digestible format for people interested in the patterns of violent death across the state. Cassady and Lily hope to provide MOVDRS data to the public as soon as they can because, as Cassady said, "We are trying to provide the most useful data, particularly for the prevention side, to be able to drill down to the specifics… To be able to see exactly what is connected to homicides, to suicide, to regions, to tell St. Louis region 'This is what you need to look for', which could be different from Kansas City or Springfield or Columbia. It's important for people to have those specifics to get even closer to the root issues." Long term plans include linking the NVDRS data to Missouri hospitalization data and including MOVDRS data into the MOPHIMS Profile pages.
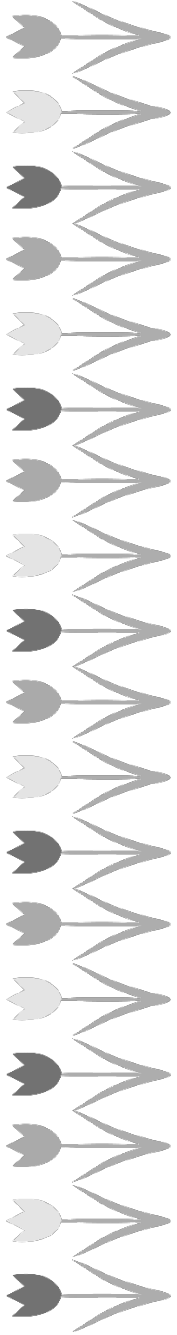
Training Updates

Happy Spring, MOPHIMS users! As Easter lilies push their way through the March mud, we here in BHCADD start planning for our favorite time of year- the MOPHIMS Training Tour. Our goal is to travel to at least seven locations across Missouri this spring and summer, engaging with our users and sharing ways in which they can use MOPHIMS and other DHSS resources to enhance the great work that is already going on in our communities. As always, we would like your input on locations for the trainings. If you know that your community would greatly benefit from these free MOPHIMS workshops or you have a lead on a facility for us to host the trainings, please let us know. We try to be flexible on most things, but we've found that being hands on in computer labs with around 20 stations is the best environment for our students to flourish. Email MOPHIMSUserGroup@health.mo.gov if you have questions or want to chat about our team coming to you!

We have scheduled our first training of the Tour in Jefferson City. We hope to see you in May at the always lovely MOTEC facility. Click the link below to register by May 15. Other scheduled dates and locations can be reviewed at https://health.mo.gov/data/mica/MICA/healthdatatraining.html#locations. Registration will open 4-6 weeks before each training, so check back regularly.

| Location:	Course 1-MOPHIMS: Introduction to Profiles and MICA	Course 2-MOPHIMS: Health Data Analysis	Registration Link:
MOTEC 1538 E Elm St Jefferson City, MO 65101	May 29 (Deadline: May 15) Limit: 20 participants	May 30 (Deadline: May 15) Limit: 20 participants	https://www.surveymonkey.com/r/VXDY8C6
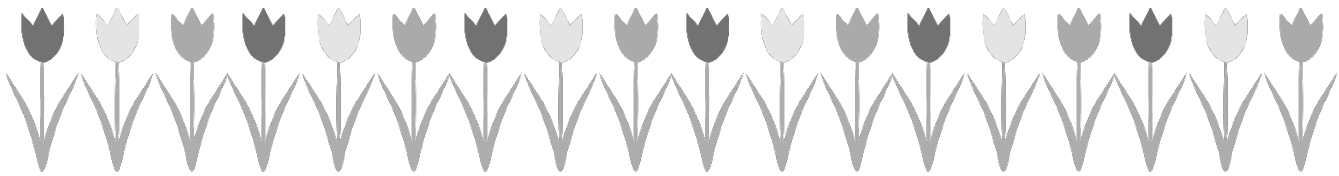
Q & A

"I noticed a new 'Search' or 'Indicator Search' button on the MOPHIMS toolbar. What is this and how can I use it?"

MOPHIMS Search is the result of our effort to help users find the information they are seeking more efficiently. MOPHIMS contains hundreds of different data types, and even our most experienced users struggled to find the data they were seeking quickly. Our original idea to make data more discoverable was to create an index, however we realized this index would be too large, so we brainstormed ideas about how to automate it and this eventually morphed into the MOPHIMS search.

The following is an example of how the new search function works. Say that you want to research how asthma is affecting individuals in your community, so you decide to search through MOPHIMS to see all the available asthma data we provide that could help you. To begin, click on "Search" that is at the top banner of every MOPHIMS webpage:

This will take you to the Search Indicator page. Just to see what type of asthma data MOPHIMS can provide, enter "asthma" in the search box next to **Search For:** and then click on the **Submit** button.
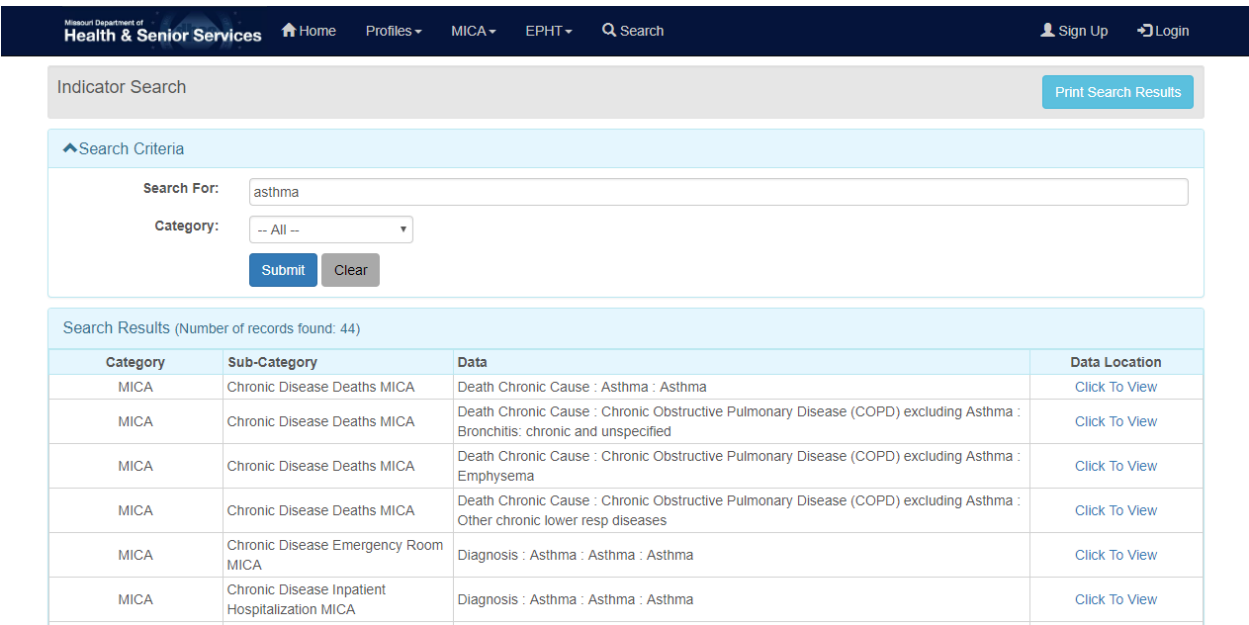
When doing this, you will be given a table that lists all available data relating to asthma that MOPHIMS provides. As you see, that lists contains several dozen different data types. For several health conditions in Missouri, the search results can be overwhelming. To help you with this, we have provided tools to help narrow the results down. Returning to the original example, let's say that after you decide that you would like to see any Profile pages that provide data for children with asthma.

The first step in narrowing the search results is to select "Profiles" from the **Category** drop-down selection box. When you do this, you will see a **Sub-Category** drop-down selection box appear. Select "Child Health" from this box, and then click on the **Submit** button (*below*).

You've now narrowed the results down to the two results relevant to your original research question. From there, we have made it easy to for you to go to the MOPHIM tool that houses that data. Simply click on "Click To View" to the right of each of your search results, and that page will be opened in a new tab in web browser.

We really hope the indicator search function makes your use of MOPHIMS easier and more productive. If you have any questions or ideas to add on to this feature, feel free to contact the MOPHIMS team with your thoughts.
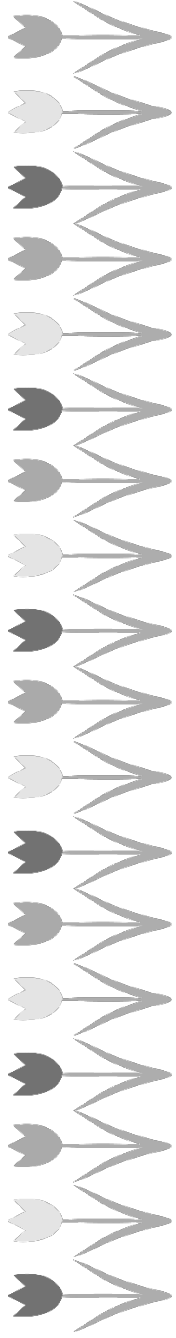
Practice Exercise

With the recent release of the 2016 Missouri County Level Study (CLS), a health policy practitioner has taken the lead to assess differences compared to the 2011 CLS.

1) How do the indicators below compare for Missouri when you look at the 2016 versus 2011 CLS and how can you interpret them?

   a) *No health care coverage – Ages 18-64*

   _____

   b) *Did not get medical care because of cost or no insurance - Among those who needed medical care but could not get it in the past 12 months*

   _____

2) List four new indicators in 2016 CLS under Access to Care that were not in any section of the 2011 CLS.

   _____

3) For years, some have proposed to reduce cigarette smoking by shifting smokers to potentially less harmful alternatives. With this attempt, there has unfortunately been an unexpected crisis of vaping (electronic cigarette use) amongst youth. To combat this problem, you have been asked to compile some statistics to help decide which counties would benefit from focusing their time and resources on this specific issue. Use the 2016 CLS to obtain the answers to the following questions.

   a) What is the estimated statewide prevalence of *current electronic cigarette use (vaping)*? _____

   b) Are there BRFSS regions that have a prevalence that is statistically significantly higher compared to the state for this indicator? _____

   c) Is there an area that you would focus more on over another when trying to allocate resources to combat this issue? Why or why not?

   _____

About the MOPHIMS User Newsletter Group
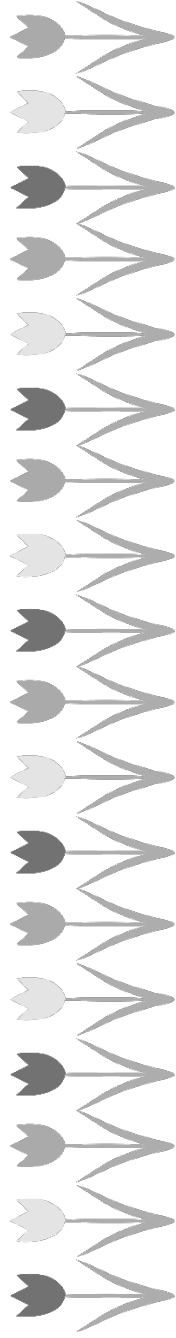
The MOPHIMS User Group Newsletter was created in response to user requests for communication on updates to the MICA system, descriptions of new features, additional practice exercises, announcements of training opportunities, and any other new information about data that might help them perform their jobs more efficiently.

Newsletters will be published on a semi-annual basis. If you have ideas for content, please send them to Andrew.Hunter@health.mo.gov or Whitney.Coffey@health.mo.gov. We would especially like to feature stories describing your success at completing projects or obtaining grants using the MICA tools as well as interviews with public health professionals about your duties and how you use MICA to accomplish them.

Past issues are available at http://health.mo.gov/data/mica/MICA/newsletters.html.

Contributors:

Andy Hunter, Whitney Coffey, Jeremy Rowles, Teresia Karuga, and Evan Mobley

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How to Sign Up or Opt Out

If you have enjoyed this newsletter, please feel free to share it with your colleagues and community partners. We encourage them to sign up for the MICA User Group by sending an email to MOPHIMSUserGroup@health.mo.gov with the subject line MOPHIMS User Group. This will let us know to send newsletters to them directly so they do not miss any information. Also, we may occasionally distribute time-sensitive information on topics such as training opportunities via e-mail if the newsletter is not scheduled for publication prior to a registration deadline. Finally, the MOPHIMS User Group list helps us track the types of organizations using the tools, which is one of our performance measures.

 If you would like to opt out of the MOPHIMS User Group, please send an e-mail with Unsubscribe in the subject line to MOPHIMSUserGroup@health.mo.gov. PLEASE NOTE: Depending on your position title, you may still receive other types of e-mail messages from us. For example, we are requested to send training information to all LPHA Administrators, even if they have unsubscribed from the MOPHIMS User Group.

Contact Information

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